determining the ON/OFF status of said unit;

a'mcl'd if the unit is ON requesting that the unit be maintained ON until the value of an auxiliary system parameter exceeds a unit ON auxiliary system threshold value; and

if the unit is OFF requesting that the unit be turned ON when the value of said parameter falls below a unit OFF auxiliary system threshold value.

2. (Amended) A method of reducing the number of times a main power unit of a hybrid electric vehicle is activated to support an auxiliary system of the vehicle during a given drive cycle comprising a sequence of the following steps:

determining the ON/OFF status of said unit;

determining whether the value of an auxiliary system parameter is within or outside a window defined by first and second threshold values, where said first threshold value represents a parameter value to be attained before a unit that is ON should be turned OFF and the second threshold value represents a parameter value at which it is desirable for a unit that is OFF to be turned ON;

requesting a change of status from OFF to ON if the value of the parameter falls below said second threshold value; and

requesting a change of status from ON to OFF if the value of the parameter is greater than said first threshold value.

3. (Amended) The method of Claim 1 further comprises the steps of:

setting said unit OFF auxiliary system threshold value when the status of said unit is OFF; and

setting said unit ON auxiliary system threshold value when the status of said unit is ON.

a2 10. (Amended) A system for reducing the number of times a main power unit of a hybrid electric vehicle is activated to support an auxiliary system of the vehicle during a given drive cycle comprising:

means determining the ON/OFF status of said unit;

a2 cncl'd.

means requesting that the unit be maintained ON until the value of an auxiliary system parameter exceeds a first threshold value; and

means requesting that the unit be turned ON when the value of said parameter falls below a second threshold value;

wherein said first threshold value is a unit ON auxiliary system threshold value and said second threshold value is a unit OFF auxiliary system threshold value.

Please add new claims 21-22 as follows.

a3

21. (New) A system for reducing the number of times a main power unit of a hybrid electric vehicle is activated to support an auxiliary system of the vehicle during a given drive cycle comprising:

means for determining the ON/OFF status of said unit;

means for determining whether the value of an auxiliary system parameter is within or outside a window defined by first and second threshold values, where said first threshold value represents a parameter value to be attained before a unit that is ON should be turned OFF and the second threshold value represents a parameter value at which it is desirable for a unit that is OFF to be turned ON;

means for requesting a change of status from OFF to ON if the value of the parameter falls below said second threshold value; and

means for requesting a change of status from ON to OFF if the value of the parameter is greater than said first threshold value.

22. (New) The system of Claim 10 further comprising:

means for setting said unit OFF auxiliary system threshold value when the status of said unit is OFF; and

means for setting said unit ON auxiliary system threshold value when the status of said unit is ON.